

Hazards-United States (Hazus) is a nationally applicable standardized methodology that contains models for estimating potential losses from earthquakes, floods, hurricanes, and in 2013, tsunamis. Hazus uses Geographic Information Systems (GIS) technology to estimate physical, economic, and social impacts of disasters. Users can then visualize the spatial relationships between populations and other more permanently fixed geographic assets or resources for the specific hazard being modeled, a crucial function in the pre-disaster planning process.

Hazus is used for mitigation and recovery as well as preparedness and response. Government planners, GIS specialists, and emergency managers use Hazus to determine losses and the most beneficial mitigation approaches to take to minimize them. Hazus can be used in the assessment step in the mitigation planning process, which is the foundation for a community's long-term strategy to reduce disaster losses and break the cycle of disaster damage, reconstruction, and repeated damage. Being ready will aid in recovery after a natural disaster.

The Hazus Tsunami Module kicked off development in October 2011. The project fully funded by FEMA is expected to be completed in Spring of 2013. FEMA's Hazus development is reviewed by an external review board put together by the National Institute of Building Science (NIBS). NIBS provides independent validation and verification of the process and methodology used to produce the module. Methodology for the module will both include a Tsunami-only Hazard Analysis, which will account for far-field events and an Earthquake & Tsunami Hazard Analysis that will account for a near-field event. Impacts in this module will include shelter estimates, casualty estimates, direct economic losses and debris. The current status of the project as of July 2012, the review committee is providing feedback to the developers for a development of the methodology document that supports the module. In conjunction, the FEMA contractors are developing the data module and software prototype for Tsunami Hazus to be reviewed by the NIBS committee in the coming months.